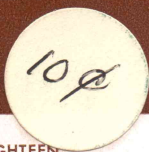


The Deltagram

TRADE MARK REG. U. S. PAT. OFF.



VOLUME EIGHTEEN

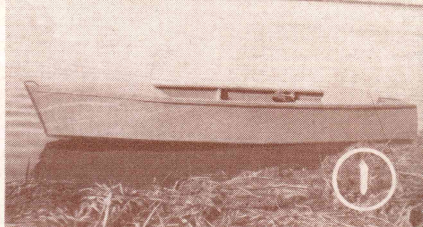
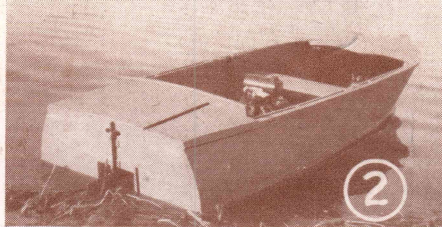
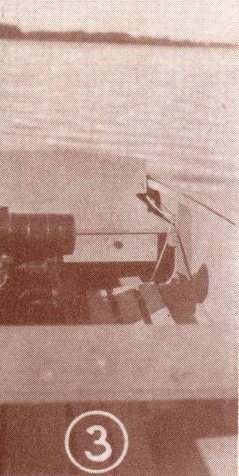
Issue No. 1, 1948, '49

FIFTEEN CENTS



- ★ MODERN CHAIR
- ★ CHEST of DRAWERS
- ★ LAMP TABLE
- ★ DUCK CALL
- ★ SHAKER SET
- ★ ASH TRAY
- ★ DESIGNS ★ ETC.



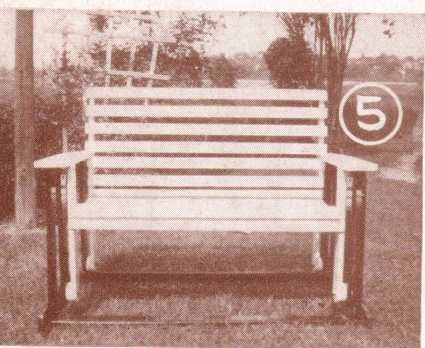


With DELTA CRAFTERS

☆ Photos Nos. 1, 2 and 3 show an inboard motor boat made by A. E. Gaulke of Milwaukee, Wisconsin. He liked our No. 4633 Utility Boat Plan, so he converted it to an inboard type and said that the craft performs beautifully even on choppy waters.

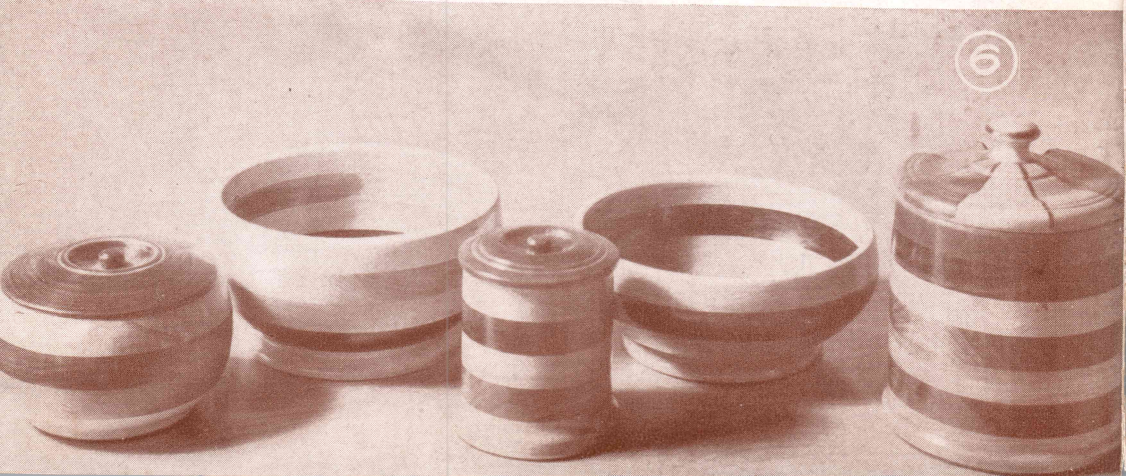


☆ Mr. Orrin Hale of Chicago, Illinois is a student at the Washburne Trade School of Chicago. He picked out the chair and table project from the "19 Charming Chairs," a Deltacraft publication (Photo No. 4) as one of his class projects. He made one addition to the plans. This was a stretcher to give more strength to the front legs.



☆ Because of the nice job Mr. Boinski of Milwaukee, Wisconsin did on the glider swing (Photo No. 5) he not only received a lot of compliments, but also two orders from his friends. This project appeared in Issue No. 5, Vol. 15.

☆ Another regular contributor to this page is E. V. Butler of Paw Paw, Michigan. Photo No. 6 shows some more fine pieces of turnings he recently made on his lathe.

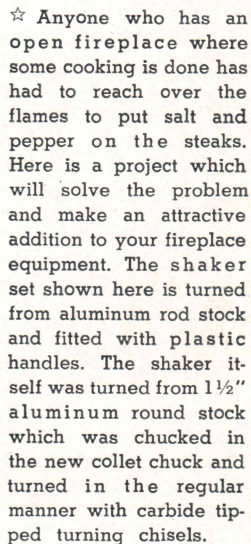


TRADE MARK REG. U. S. PAT. OFF.

• PUBLISHED BY THE DELTA MANUFACTURING
COMPANY, MILWAUKEE, WISC. SOLD ONLY BY
SUBSCRIPTION - 75¢ THE YEAR.

A. M. WARKASKE - TECH. EDITOR

FIFTEEN CENTS



The cap on the shaker may be threaded with thread chasers if a set of dies is not available. The handle was turned from $\frac{1}{2}$ " hexagon stock supported at both ends in the lathe and turned to the correct shape as shown in the drawing. The handles were turned from brightly colored plastic rods and drilled to fit the aluminum handle. All parts should be brightly polished with steel wool, followed by buffing compounds.



**Designed by
WALTER O. CAVE**



☆ Here is an attractive pedestal table built from walnut or cherry lumber. The pedestal is turned in the lathe, and to make the job easier a full-size cardboard template should be laid out from the drawing on the next page. The three legs should be built up from three layers of wood. The two outside layers should be solid lumber, either walnut or cherry whichever you have selected, and the center layer should be $\frac{1}{8}$ " plywood which gives added strength to the thin contour legs.

After this stock has been glued up the legs are band-sawed to shape and drilled for the $\frac{1}{4}$ " dowels which hold them to the pedestal. The table support should be turned on the lathe and drilled to fit the tenon on the end of

BUILD THIS ATTRACTIVE PEDESTAL TABLE

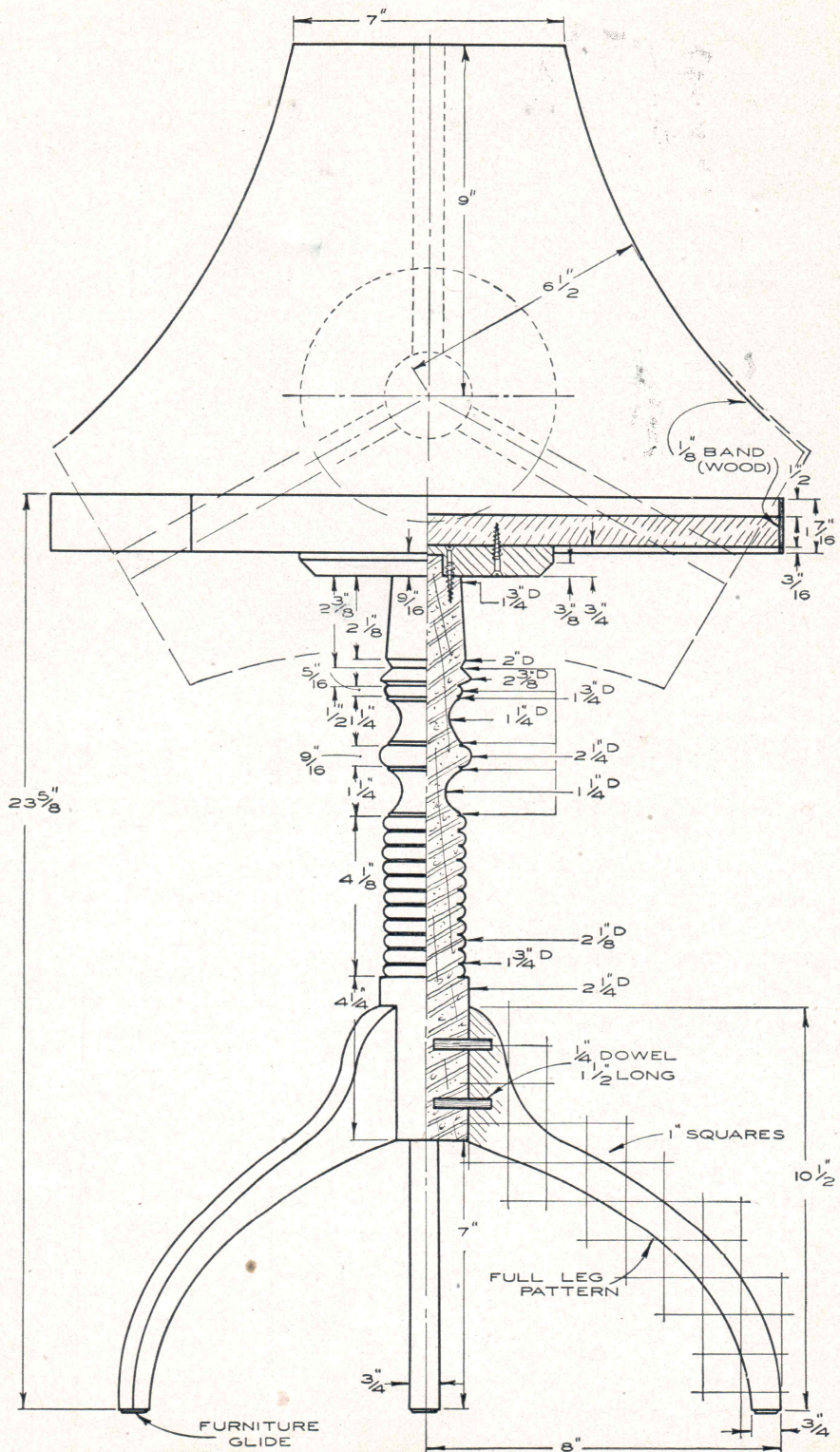
BILL OF MATERIAL

1 Table Top	$\frac{3}{4}$ "x $19\frac{3}{8}$ "x $19\frac{3}{8}$ "
1 Table Support	$\frac{3}{4}$ "x $6\frac{1}{2}$ "x $6\frac{1}{2}$ "
1 Pedestal	$2\frac{1}{4}$ "x $2\frac{1}{4}$ "x $15\frac{1}{4}$ "
3 Legs	$\frac{3}{4}$ "x $2\frac{3}{4}$ "x $13\frac{1}{2}$ "
1 Table Edging	$\frac{1}{8}$ "x $1-7/16$ "x 60"
1 $\frac{1}{4}$ " Dowel 12" Long.....	

the pedestal. This table support is then glued and screw fastened to the top of the pedestal.

The table top is next band-sawed from $\frac{3}{4}$ " lumber and the edges are sanded smooth. The $\frac{1}{8}$ " binding is now fastened to the edges with glue and small brads. The corners of this wood band are mitered.

The table may be finished natural or stained a darker color.





The chair shown in the photograph above is built from waterproof plywood, and the seat and back are threaded with nylon parachute cord.



Modern Lightweight CHAIR

WITH NYLON CORD SEAT AND BACK

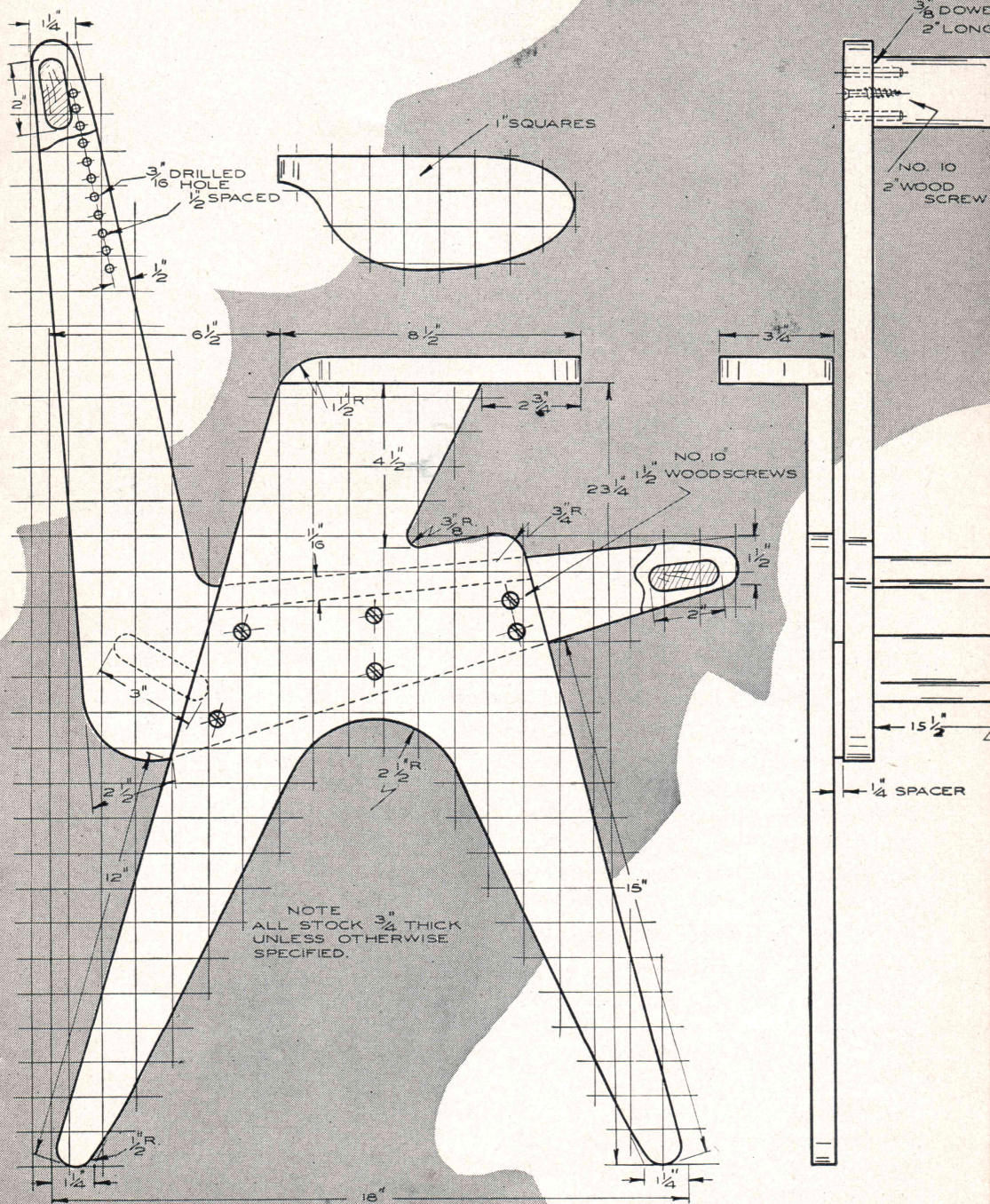
☆ The design of this chair is novel and somewhat on the extreme modern side. It will not, of course, fit into all surroundings but would be an attractive matching piece for one or two of the modern desks which we have shown recently in the Deltagram. The main body of the chair, including the legs and side frames, is band sawed from $\frac{3}{4}$ " or 1" waterproof plywood. The cross pieces between the two side frames are solid hardwood such as birch or maple. These cross frames are glued and doweled to the sides and then reinforced with flathead wood screws. $\frac{3}{16}$ " holes are spaced evenly along the edges of the side frames for threading the nylon cord. A $\frac{1}{4}$ " plywood spacer is added between the side frames and the legs, as shown

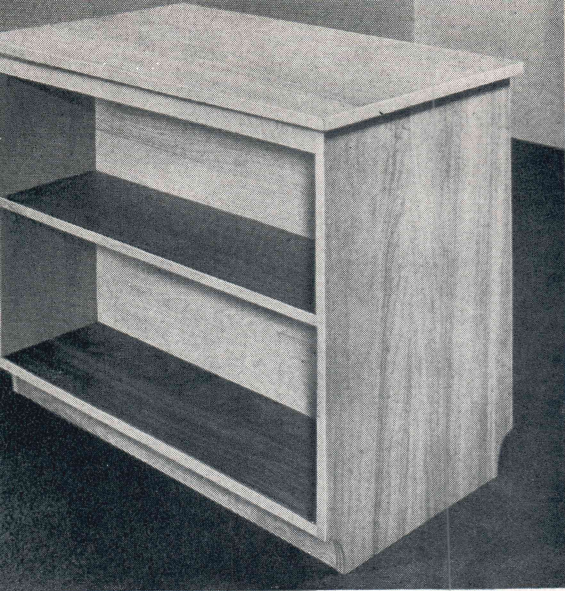
on the drawing, so that a space is left for the cord to go around the edges of the seat.

The nylon cord used in this project was purchased from a war surplus center. About 200 feet of parachute cord was used.

BILL OF MATERIAL

Name of Part	No. Req.	Size
Side	2	$\frac{3}{4}$ " x 18" x 23 $\frac{1}{4}$ "
Seat Frame Side	2	$\frac{3}{4}$ " x 22" x 23"
Front and Top		
Seat Stretcher	2	$\frac{3}{4}$ " x 2" x 15 $\frac{1}{2}$ "
Bottom Seat		
Stretcher	1	$\frac{3}{4}$ " x 3" x 15 $\frac{1}{2}$ "
Arm Rest	2	$\frac{3}{4}$ " x 3 $\frac{1}{4}$ " x 8 $\frac{1}{2}$ "
Spacer	2	$\frac{1}{4}$ " x 4 $\frac{1}{2}$ " x 12"
Dowel	12	$\frac{3}{8}$ " dia. x 2" long
Nylon Cord		$\frac{3}{16}$ " dia. x 200 ft.





The double-faced book shelves as shown in the photographs above would make a practical unit of furniture for a room in which two children must do their studying. Each would have a private shelf space.



DOUBLE - FACED BOOK SHELVES

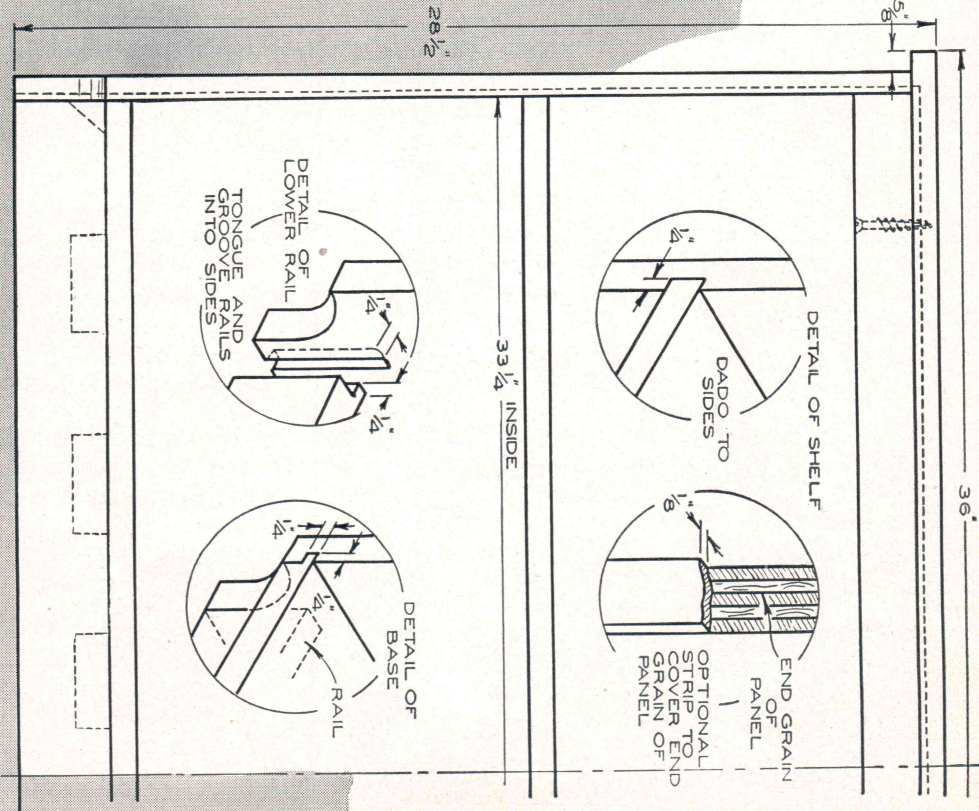
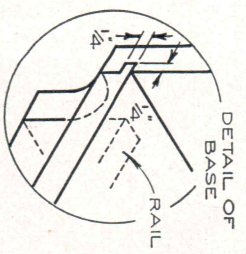
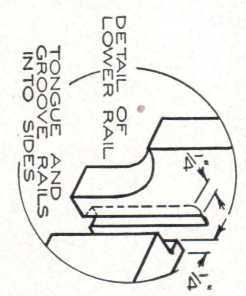
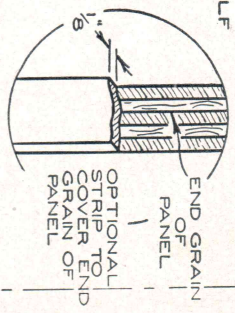
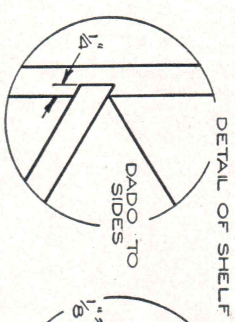
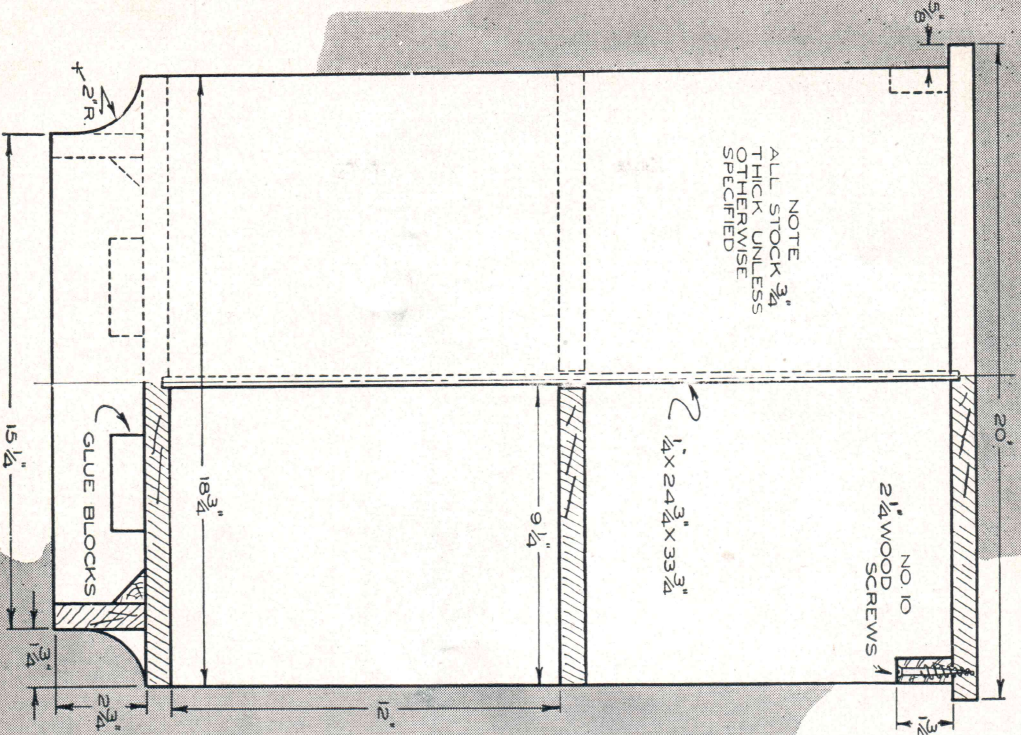
☆ The unit of furniture shown in the photographs above serves several purposes in the home. It has the advantage over regular wall shelves in that each face has its own enclosed shelves. When placed with one end against the wall it has four complete shelves for your books, plus a roomy table top for lamp, ashtray, etc.

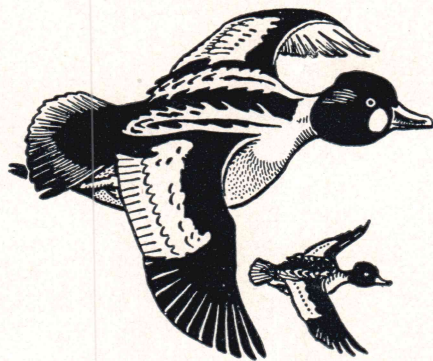
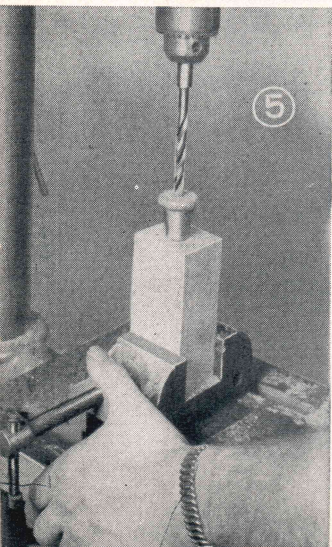
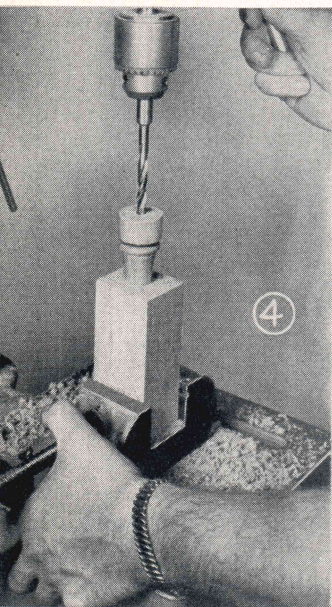
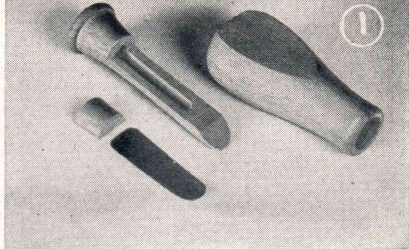
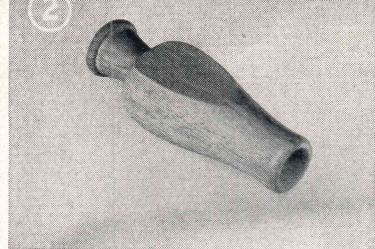
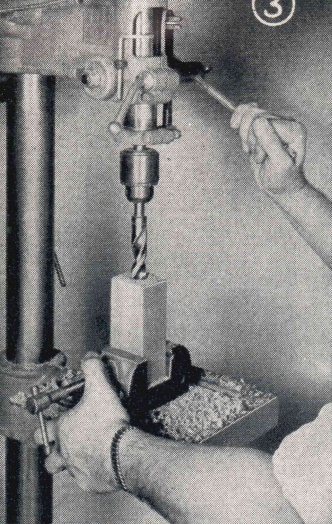
The book shelves shown above were made from birch plywood and all open plywood edges were covered with solid birch strips so that the finish could be made more attractive. The $\frac{1}{4}$ " plywood panel running through the center of the book shelves separates the two sides as shown in the drawing on the next page. After the complete book shelves are assembled and sanded it is filled with white

shellac and allowed to dry. Steel wool is then used to polish the surfaces, followed by a coat of flat white paint which is then rubbed off while the paint is still wet. This allows a slightly grayish cast to remain on the surface of the wood. After this is completely dry a coat of spar varnish completes the finish.

BILL OF MATERIAL

Name of Part	No. Req.	Size
Side	2	$\frac{3}{4}$ " x $18\frac{3}{4}$ " x $27\frac{3}{4}$ "
Top	1	$\frac{3}{4}$ " x 20" x 36"
Base	1	$\frac{3}{4}$ " x $18\frac{3}{4}$ " x $33\frac{3}{4}$ "
Shelf	2	$\frac{3}{4}$ " x $9\frac{1}{4}$ " x $33\frac{3}{4}$ "
Base Rail.....	2	$\frac{3}{4}$ " x $2\frac{3}{4}$ " x $33\frac{3}{4}$ "
Top Rail.....	2	$\frac{3}{4}$ " x $1\frac{3}{4}$ " x $33\frac{3}{4}$ "
Partition	1	$\frac{1}{4}$ " x $24\frac{3}{4}$ " x $33\frac{3}{4}$ "
Glue Block.....	16	$\frac{3}{4}$ " x $\frac{3}{4}$ " x 3"



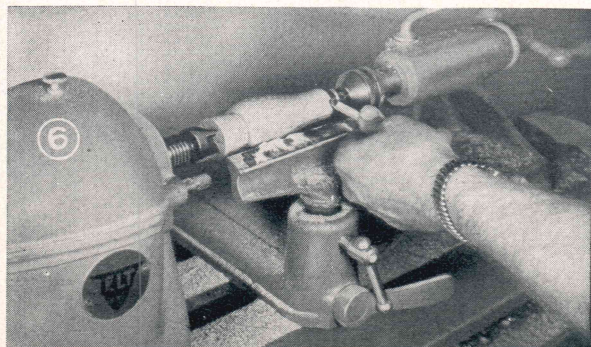


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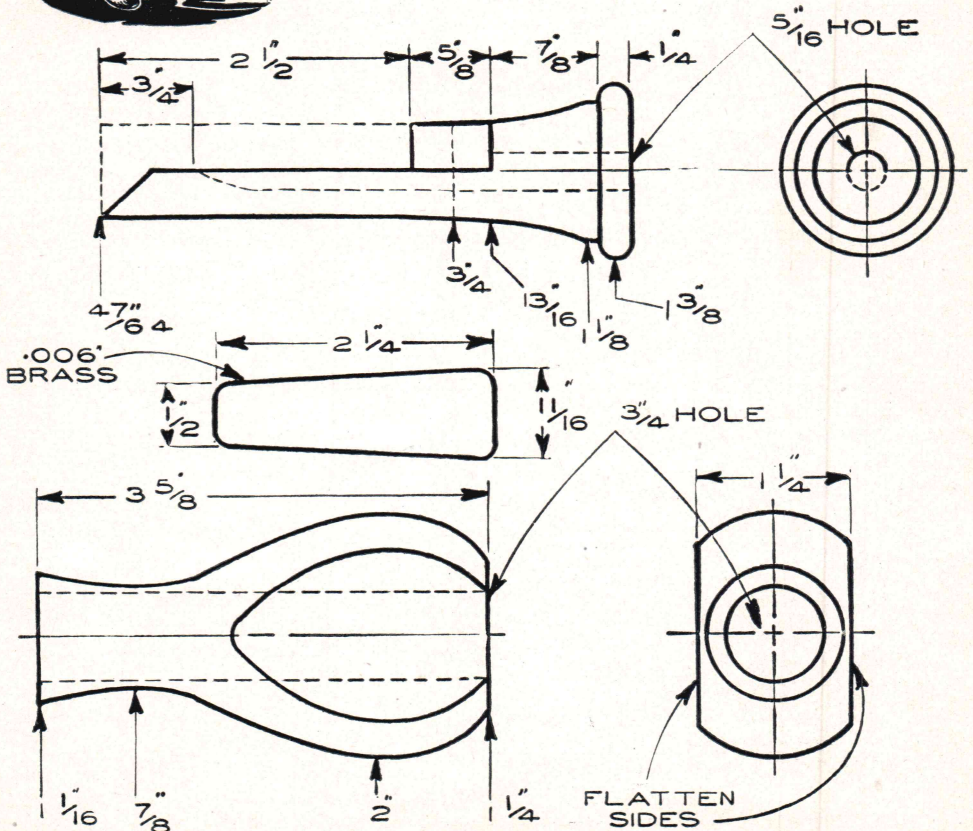
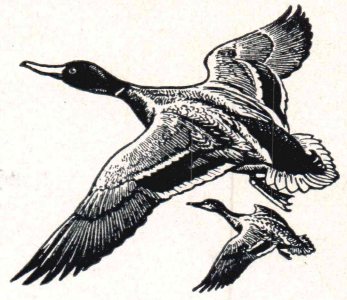
MAKE YOUR OWN DUCK CALLS

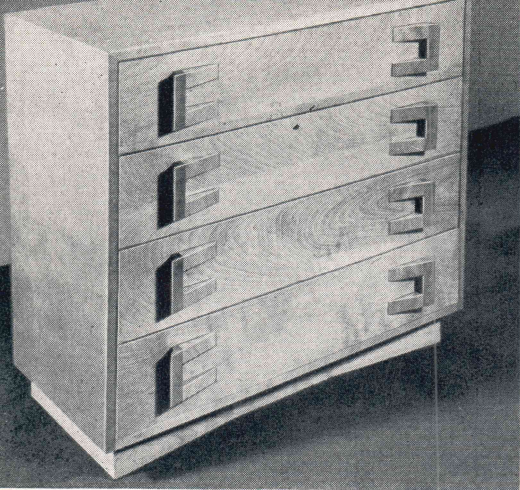
☆ Every hunter at one time or another has had the urge to make his own duck call. This project on the surface has seemed difficult to many people. The duck call shown in this article is easy to make and when correctly adjusted will produce realistic sound effects for your hunting days.

The original shown in the photographs was turned from well-seasoned oak lumber. The first step is to cut the block or the main body of the call and drill a $\frac{3}{4}$ " hole most of the way through as shown in Photo No. 3. The next step is to turn the center section on the lathe according to the pattern shown on the next page. This center section is then placed in the block as shown in Photo No. 4 and the center hole is started through until the drill enters the bell-shaped section. The drilling is then stopped and the waste stock is cut off from the end of the center section.



This center section of the call is then sawed apart to make the two sections shown in Photo No. 1. You will note that the small half segment which holds the reed in place does not have the half-drilled hole which the other part contains. With this small segment removed the two halves of the turning are placed together and returned to the hole in the body block as shown in Photo No. 5 where the center hole is completely drilled. This section of the duck call is then removed from the body and the hole is temporarily plugged with a short section of dowel so that the body may be chucked in the lathe and turned to shape as shown in Photo No. 6. After the body is turned and removed from the lathe the two sides are flattened as shown in the drawing and Photo No. 1 so that the completed duck call will not roll away if it should be dropped on a smooth surface. The reed is cut from brass or bronze shim stock .006" thick. All parts of the call are now complete and should be assembled as shown in the drawing and Photo No. 2. Some adjustment in the position of the reed should be done by experimenting until your duck call performs correctly.





The unusual design of the drawer pulls, as shown in the photographs, eliminates the hardware which is usually purchased for drawer pulls.



CHEST OF DRAWERS IN THE MODERN STYLE

☆ The all wood construction of this chest of drawers eliminates any hardware such as drawer pulls since the pulls on this chest are built up from a strip of molding and wedge-shaped blocks. This tapered design is also carried out

in the base as seen in the photographs above and in the drawing on the following page.

An additional variation in design from similar chests is that the top is deeper than the bottom — that is, the front of the chest slants back towards the wall from top to bottom. The project shown here was built from birch lumber using $\frac{3}{4}$ " panel for the top, sides, and drawer fronts. A splined miter joint is used

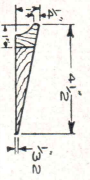
in glueing the top and sides of the chest together. All of the exposed front edges of the plywood panel should be veneered or finished off with solid strips of birch lumber. The base section is screw fastened to the under side and rein-

forced with glue blocks. Each drawer has a different depth on account of the tapered sides, so care should be taken in measuring and laying out the various parts of each drawer. The completed chest of drawers was finished with two coats of white shellac, followed by spar varnish. Polish with rotten stone and polishing oil. See "Practical Finishing Methods" No. 4543 — Price 50c — for more detailed description of finish.

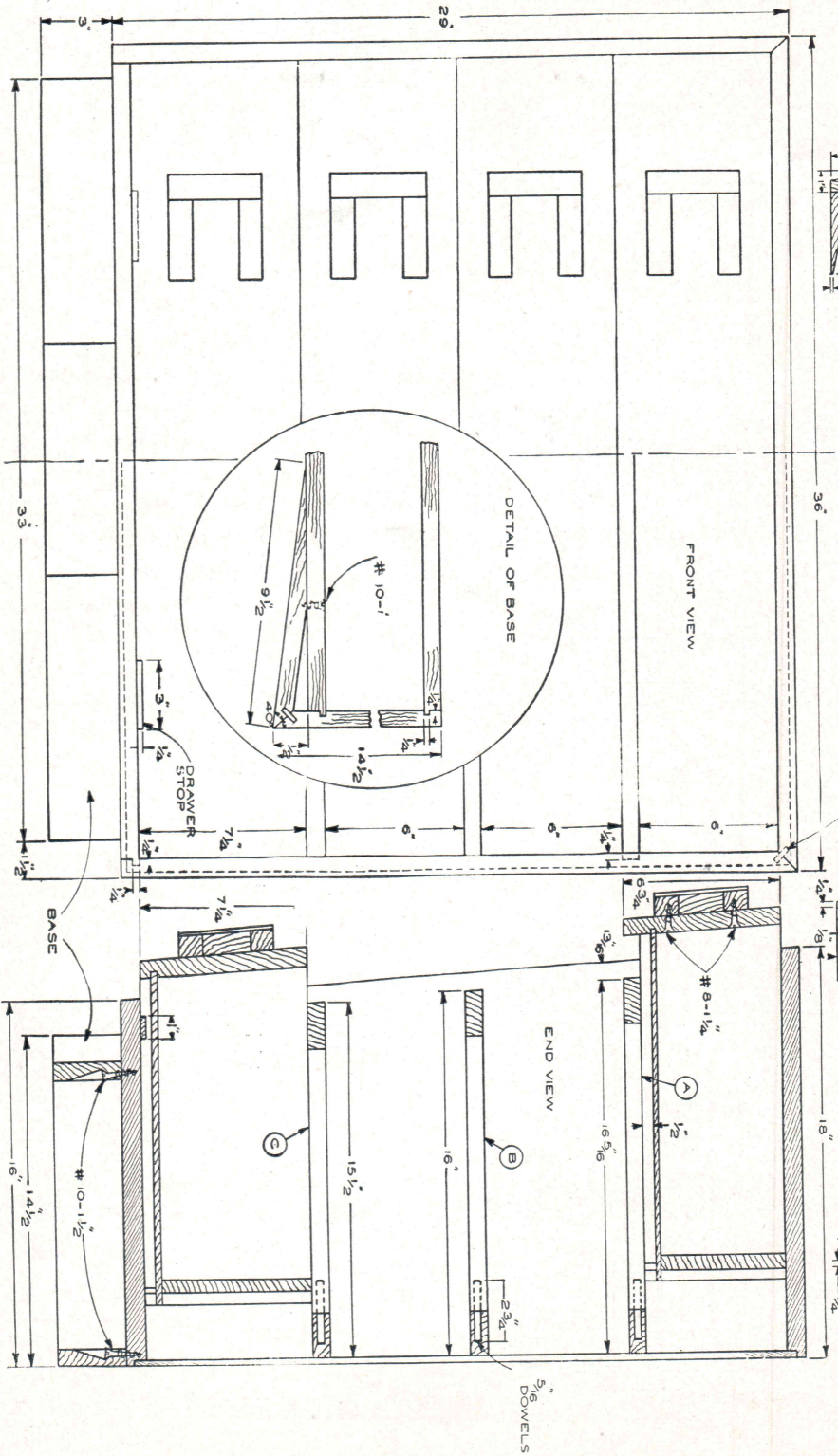
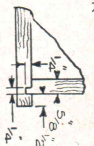
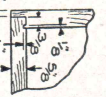
BILL OF MATERIAL

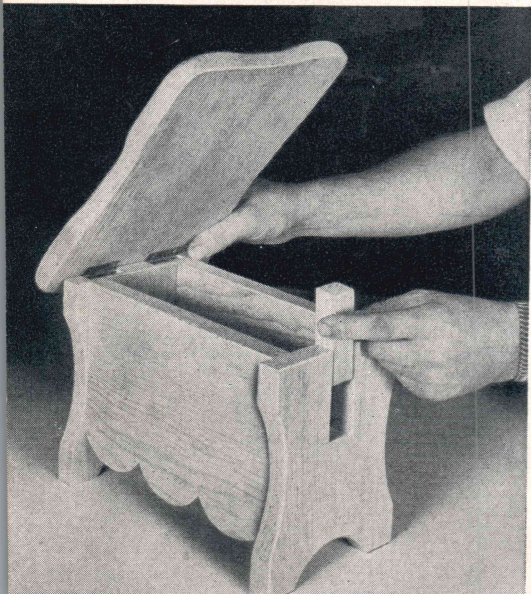
No. Req.	Name	Size
1	Top	$\frac{3}{4}$ " x 18" x 36"
2	Sides	$\frac{3}{4}$ " x 18" x 29"
1	Bottom	$\frac{3}{4}$ " x 16" x 35"
2	Ledge (A)	$\frac{3}{4}$ " x 2" x 16-5/16"
2	Ledge (B)	$\frac{3}{4}$ " x 2" x 16"
2	Ledge (C)	$\frac{3}{4}$ " x 2" x 15 1/2"
3	Drawer Slide Frame Fronts	$\frac{3}{4}$ " x 2" x 35"
3	Drawer Slide Frame Backs	$\frac{3}{4}$ " x 2" x 35"
2	Drawer Stops	$\frac{1}{4}$ " x 1" x 3"
2	Front and Back of Base	$\frac{3}{4}$ " x 3" x 33"
2	Ends of Base	$\frac{3}{4}$ " x 3" x 14 1/2"
2	Slanting Ends of Base Front	$\frac{3}{4}$ " x 3" x 9 1/2"
3	Drawer Fronts	$\frac{3}{4}$ " x 6 3/4" x 34 1/2"
3	Drawer Backs	$\frac{3}{4}$ " x 5 1/4" x 33 3/4"
3	Drawer Bottoms	$\frac{1}{4}$ " x 15 1/4" x 34 1/2"
6	Drawer Ends	$\frac{3}{4}$ " x 6" x 17 1/4"
1	Drawer Front	$\frac{3}{4}$ " x 7 1/4" x 34 1/2"
2	Drawer Ends	$\frac{3}{4}$ " x 7 1/4" x 14 3/4"
1	Drawer Back	$\frac{3}{4}$ " x 7 1/4" x 33 3/4"
1	Drawer Bottom	$\frac{3}{4}$ " x 14 1/4" x 34"
8	Drawer Handle Ends	1" x 1" x 4"
16	Drawer Handle Cross Pieces	1" x 1" x 3 1/2"
1	Plywood Panel	$\frac{1}{4}$ " x 28 3/4" x 35 1/2"
24	Dowels	5/16" x 2 3/4"
10	Screws	No. 10—1 1/2"
4	Screws	No. 10—1"
16	Screws	No. 8—1 1/4"

DETAIL OF DRAWER HANDLES



DETAIL OF DRAWER





Shoe Shine STOOL

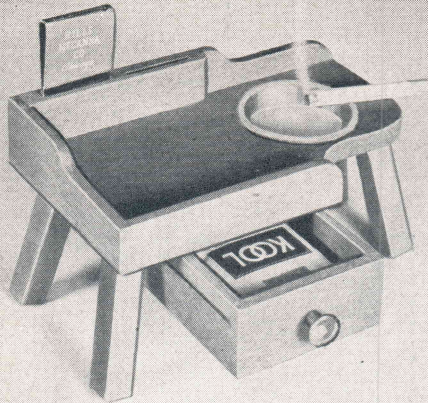
☆ $\frac{3}{4}$ " pine lumber, a pair of hinges, and a length of $\frac{1}{4}$ " dowel is all that is needed to make this combination stool and shoe-shine kit. The various parts should be cut out with the band saw from the drawings shown on the following page. The sides, bottom and ends are assembled with glue and small nails. One end contains a cut-out section which is assembled on the $\frac{1}{4}$ " dowel so that it pivots to an upright position as shown in Photos No. 2 and No. 3. This pivoted section supports the lid at an angle so that your shoe is in a more convenient position for polishing.

The corners and the curved band-sawed sections on the ends and lid are beveled to give the traditional worn appearance as seen in Colonial furniture.

The best finish for a project of this kind would be a reddish-brown maple stain, followed by orange shellac and flat varnish or wax.

BILL OF MATERIALS

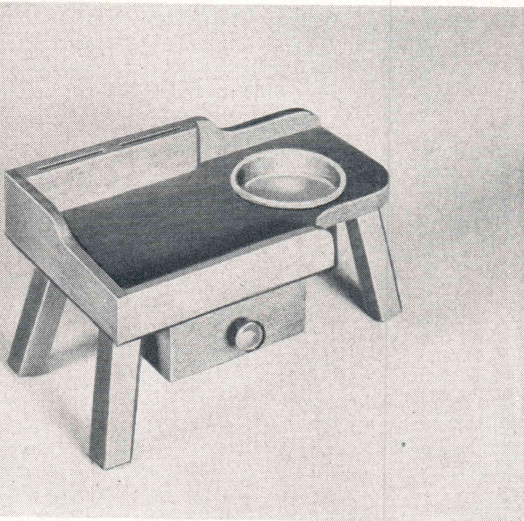
Name of Part	No. Req.	Size
End	2	$\frac{3}{4}$ " x 6" x $7\frac{1}{2}$ "
Top	1	$\frac{3}{4}$ " x $7\frac{1}{2}$ " x 12"
Bottom	1	$\frac{3}{4}$ " x $3\frac{1}{2}$ " x 9"
Side	2	$\frac{3}{4}$ " x $6\frac{1}{2}$ " x 9"
Dowel	1	$\frac{1}{4}$ " dia. x 4" long



Build this Cobbler's **ASH TRAY**

☆ Scrap pieces of mahogany and a metal ashtray are needed to complete it. The base should be cut from $\frac{1}{2}$ " stock and a metal ashtray or insert should be obtained before the hole is drilled. The back and sides are cut from $\frac{1}{4}$ " stock and fastened to the base with glue and small brads. The back railing which contains the two slots for book matches is made in two parts; the one part is notched out on the band saw and then glued to the main rail and sanded flush at the top. Two guide rails are glued to the underside of the base and the small drawer is fitted in place. This drawer was made large enough to hold either the regular or king-size cigarette.

A small brass knob completes the drawer. The project should be finished with several coats of white shellac, followed by wax.



NOW AVAILABLE — SUPPLY LIMITED!

These are not new — but have been out of stock because the binder was not available. We now have a limited supply — get yours immediately if you do not have a set of craftsheets and binder.

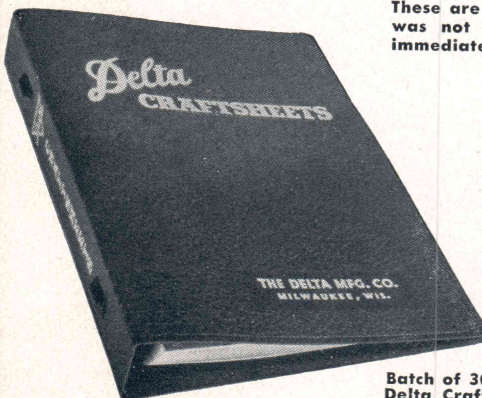
LOOK WHAT YOU GET: Sheet showing how to compute pulley speeds, complete with example and diagrams.

Sheet showing how to cut mitered segments for figures having from 3 to 14 sides.

Sheets on Shaper Knives, Spark Test for Metals, Taper Turning — Set-over Method, Application of 3-Knife Cutter Head, Abrasive Disks (with table for selecting and instructions on fitting), Standard Wood Mouldings, the Lathe Indexing Head, Type of Hinges (2 sheets), Layout Problems, and many others.

Tables and Charts

Tables and charts of valuable information, such as Speeds and Lubricants for High Speed Taps and Drills; Basic Thread Dimensions and Tap Drill Sizes; Common Wire Nails — size, length, gauge, etc.; Tables of Cutting Speeds; Counterbore Sizes for Cap Screws and Machine Screws, etc.



Batch of 30
Delta Craftsheets 25c

Handsome
Ring Binder 50c

TOTAL 75¢

FLYING CHIPS

Taps and Dies for Wood

In Issue No. 5, Volume 17 we published two firm names who could furnish taps and dies used on wood. The Joseph Woodwell Company and Vonnegut Hardware Company were mentioned. Both firms have forwarded your request letters to us to refer you to another company who supplies the taps and dies. Previously, these firms have been supplied by a foreign concern which no longer manufactures these articles; therefore they feel we should inform our readers to refer them to another company who is able to supply them.

The Woodworkers Tool Works, 222 South Jefferson Street, Chicago, Illinois now has in stock and can supply you with a new type of threader—"Chicago Threader." This threader cuts threads on rods which are adjustable from $\frac{3}{8}$ inches to 1 inch. They also have taps to match this die.

We are sorry if we have caused our readers any inconvenience and hope that all future information on this page will be absolutely correct. Should you have any further questions on these taps and dies we suggest writing to the Woodworkers Tool Works for complete literature on these items. Thank you.

The Editors

Building Fences

New York City, New York—A friend of mine who is a subscriber to your magazine, The Delta, gave me a copy to look over (Issue No. 6). After looking it over I immediately sent in my subscription for one year.

I noticed in the above issue on the Flying Chips Page that a Mr. F.C.R. wanted instructions on building fences. I know of a pamphlet that might help him out. The National Lumber Association at 1319 18th Street, N.W., Washington 6, D.C. put out a pamphlet called "Let's Build a Wood Fence" which sells for five cents. It doesn't tell the "whole story" but it may help him out.

L. R.

Special Jigs, Spray Guns and Glass

Hartford, Wisconsin—Can you help me with some of the following problems, or advise me where to get this information?

Are there any special jigs or fixtures on the market that I can buy or make that are used by large photo frame manufacturers in assembling; that is, miter vises, or clamping arrangements? Bear in mind that unlike a picture frame a photo frame has half the bottom piece cut away to allow the entrance of the easel.

Is there a spray gun on the market that can be used on narrow molding without too much waste of material while spraying?

Where can I purchase glass in different shapes such as rounds, ovals, and convexes?

The public response to my frames has been very good and by spring I hope to open my own shop. I have made over five hundred of one kind of frame, now I'm working on another in the same quantity. I also want to introduce several other styles.

I'd like to add that your books on the shaper, circular saw and the other machines have been a great help all the way through.

W. T.

There is a very good picture frame vise that is made by the Stanley Rule & Level Co.—These are available at most hardware dealers. If he does not stock it he can get it for you.

For complete information on spray guns we suggest you write direct to The DeVilbiss Co., Toledo, Ohio. We have no information as yet on the special glass shapes.

If any of our readers have any good suggestions on the above questions we will be happy to pass these along to W. T.—Thanks.

Building a Model House

Toronto, Canada—I wonder if you would be able to help me get some information about building a model house to architect's specifications. I have made complete inquiries from our libraries in Toronto but have only been able to obtain one book "The Craft of Model Making" by Thomas Bayley, R.B.A., A.R.C.A. It is quite a complete book, but the materials mentioned are all English and some with which we are not familiar here. The States seem to be so much more progressive in these things, that I feel sure something must have been written in connection with building wooden model houses. It is possible that there are trade magazines giving this information but I don't know where to begin to find them.

We are subscribers to "The Delta" and as your Flying Chips Page seems to have been helpful to so many perhaps you would be good enough to give us what information you have regarding publications on the subject of building wooden model houses.

A. J. H.

For complete information on the above subject we would recommend writing to the Government Printing Office, Washington 25, D.C., and the Library of Congress also at Washington.

Lamp Chimneys

Minneapolis, Minnesota—Would you please furnish me with the name or names of manufacturers or distributors of small glass lamp chimneys similar in shape to the old-fashioned kerosene lamps. I wish to construct some colonial hanging type lamps for a basement recreation room in which the ceiling is only seven feet, thus limiting the size of the fixtures.

H. J. S.

Your local hardware dealer should be able to get these for you if he does not stock them. Might also try the department or variety stores.

Our Error

Memphis, Tenn.—In your Issue No. 6, Volume 16 regarding the gate designs on page 107 the diagonal braces of the gates which, according to the diagrams as shown, would soon allow the gate to sag. The double gates would soon be binding at the top and open at the bottom.

Diagonal braces, according to all carpenters in practical usage, agree that they should run from the lower hinge to the upper right. Never have I seen them so placed as in your diagram. Experience tells me I'm right. What do you say?

M. D. B.

We want to thank our reader for his very constructive criticism on our drawing in the Delta. He is right, the braces should definitely have been drawn the other way.

• The wrong "Bill of Material" was printed for the "Occasional Table" in Issue No. 6—Vol. 17—page 116. The following is the corrected Bill of Material:

BILL OF MATERIAL

1 Table Top	13/16" x 18 1/2" x 18 1/2"
3 Top Supports	9/16" x 1 1/2" x 12"
3 Legs	1 1/8" x 5" x 19 5/8"
1 Ring Support	1 1/8" x 5 5/8" dia.
Spline	1/4" x 3/4" x 10"

DESIGNS

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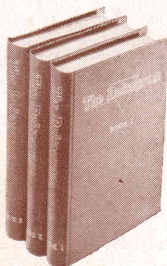
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